§ 250.415 What must my casing and cementing programs include?

Your casing and cementing programs must include:

- (a) Hole sizes and casing sizes, including: weights; grades; collapse, and burst values; types of connection; and setting depths (measured and true vertical depth (TVD));
- (b) Casing design safety factors for tension, collapse, and burst with the assumptions made to arrive at these values:
- (c) Type and amount of cement (in cubic feet) planned for each casing string:
- (d) In areas containing permafrost, setting depths for conductor and surface casing based on the anticipated depth of the permafrost. Your program must provide protection from thaw subsidence and freezeback effect, proper anchorage, and well control;
- (e) A statement of how you evaluated the best practices included in API RP 65, Recommended Practice for Cementing Shallow Water Flow Zones in Deep Water Wells (as incorporated by reference in §250.198), if you drill a well in water depths greater than 500 feet and are in either of the following two areas:
- (1) An "area with an unknown shallow water flow potential" is a zone or geologic formation where neither the presence nor absence of potential for a shallow water flow has been confirmed.
- (2) An "area known to contain a shallow water flow hazard" is a zone or geologic formation for which drilling has confirmed the presence of shallow water flow; and
- (f) A written description of how you evaluated the best practices included in API Standard 65—Part 2, Isolating Potential Flow Zones During Well Construction, Second Edition (as incorporated by reference in §250.198). Your written description must identify the mechanical barriers and cementing practices you will use for each casing string (reference API Standard 65—Part 2, Sections 4 and 5).

[76 FR 64462, Oct. 18, 2011, as amended at 77 FR 50891, Aug. 22, 2012]

§ 250.416 What must I include in the diverter and BOP descriptions?

You must include in the diverter and BOP descriptions:

- (a) A description of the diverter system and its operating procedures;
- (b) A schematic drawing of the diverter system (plan and elevation views) that shows:
- (1) The size of the annular BOP installed in the diverter housing;
 - (2) Spool outlet internal diameter(s);
- (3) Diverter-line lengths and diameters; burst strengths and radius of curvature at each turn; and
- (4) Valve type, size, working pressure rating, and location;
- (c) A description of the BOP system and system components, including pressure ratings of BOP equipment and proposed BOP test pressures:
- (d) A schematic drawing of the BOP system that shows the inside diameter of the BOP stack, number and type of preventers, all control systems and pods, location of choke and kill lines, and associated valves;
- (e) Independent third-party verification and supporting documentation that show the blind-shear rams installed in the BOP stack are capable of shearing any drill pipe (including workstring and tubing) in the hole under maximum anticipated surface pressure. The documentation must include actual shearing and subsequent pressure integrity test results for the most rigid pipe to be used and calculations of shearing capacity of all pipe to be used in the well, including correction for MASP:
- (f) When you use a subsea BOP stack or surface BOP stack on a floating facility, independent third-party verification that shows:
- (1) The BOP stack is designed for the specific equipment on the rig and for the specific well design;
- (2) The BOP stack has not been compromised or damaged from previous service:
- (3) The BOP stack will operate in the conditions in which it will be used; and
- (g) The qualifications of the independent third-party referenced in paragraphs (e) and (f) of this section:
- (1) The independent third-party in this section must be a technical classification society, or a licensed professional engineering firm, or a registered professional engineer capable of providing the verifications required under this part.